



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,305	01/23/2004	Junichi Ide	P24849	4627
7055	7590	12/28/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C.			LANDRUM, EDWARD F	
1950 ROLAND CLARKE PLACE			ART UNIT	
RESTON, VA 20191			PAPER NUMBER	

3724

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

RLH

Office Action Summary	Application No.	Applicant(s)	
	10/762,305	IDE ET AL.	
	Examiner	Art Unit	
	Edward F. Landrum	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 2, 4 and 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Foreign Patent Document.

DETAILED ACTION

Response to Arguments

First, the Examiner would like to point out that a dependent claim does limit the scope of a claimed invention. In response to the Applicant's argument the dependent claims are not subcombinations useable together. The Examiner would like to point out the combination of these devices is disclosed in the spec. Furthermore, for example, the subcombination of the cleaning apparatus does not require the subcombination of the sucking mechanism to work, but both would be useable together.

In Response to the applicant's arguments that there is not a serious burden on the Examiner to examine the claims of the application. The feeding mechanism would further need to be searched in class 414, while the cleaning subcombination would further need to be searched in class 141.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westerman (U.S Patent No. 4,581,188) in view of Layman (U.S Patent No. 3,728,062), and Herbst et al (U.S Patent No. 3,970,023), hereinafter Herbst, in further view of Hiroshi et al (Japanese Publication No. 58-175630), hereinafter Hiroshi.

Westerman teaches an optical recording medium manufacturing apparatus with a transfer mechanism (12) and an indexing device (62) that transfers a disk-shaped substrate (36) from a first processing location, an automated press (10), to a second processing location (see Figure 3), a trimming station (16). A motor (116), and gear drive (118) provide power for the indexing device (62) and transfer mechanism (12).

Westerman teaches all of the elements of the current invention as stated above except for a cutting station that forms a circular cut in the resin layer of a disk, and a punching station that punches a central hole in the disk shaped substrate.

Layman teaches (see Figures 1 and 2) a blade penetrates a work piece around the periphery of the article to be removed to facilitate removal of the article at a later time.

Herbst teaches (see Figure 4) scoring an object while only scoring one of two separate and distinct layers of a work piece for the purpose of preventing a fracture within the protective layer (3a) saving a user from having to reapply the protective enamel.

Hiroshi teaches (see Figure 3) pushing a plastic or resin onto punch for the purpose of cutting said plastic or resin.

It would have been obvious to have modified Westerman to incorporate the teachings of Layman, Herbst, and Hiroshi to create an apparatus that would score the periphery of a hole for the center of a two layered disk, then transfer the disk to a punching station and then punch the scored hole out of the disk. The scoring of the resin layer before punching the hole out of the disk would help prevent any fractures in the resin layer caused by the punching process. Since the resin layer is designed to be a protective coating for the disk shaped substrate, preventing any fractures in the protective coating would be important to increasing the overall life of the disk. Furthermore, it is old and well known in the cutting art to score ceramic materials before cutting them for the purpose of preventing cracks and fractures within the ceramic material.

Although Westerman does not specifically state the use of a control section to control each manufacturing and transfer stage of the apparatus, the use of control sections in manufacturing processes is old and well known would have been obvious to incorporate a control section to increase the overall efficiency of the apparatus and provide for safety measures so as to not damage parts of the apparatus if one part malfunctions or breaks down.

Claims 3, and 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Westerman in view of Boitnott et al (U.S Patent No. 5,863,170), hereinafter Boitnott.

The modified device of Westerman teaches all of the elements of the current invention as stated above except for a feed mechanism that feeds the transfer

mechanism at a substrate feed location, and a delivery mechanism that takes the completed product from the transfer mechanism at a substrate delivery location.

Boitnott teaches (see Figure 2b) a feed mechanism for delivering objects onto a transfer mechanism at a feed location, and a delivery mechanism which takes finished products off of the transfer mechanism at a delivery location.

It would have been obvious to have modified the modified device of Westerman to incorporate the teachings of Boitnott to provide feed and delivery mechanisms to the manufacturing apparatus to make the manufacturing apparatus more efficient by providing an unfinished disk whenever one was necessary and removing a disk when manufacturing was complete. Feed and delivery mechanisms would allow users of the manufacturing apparatus to stand over a control mechanism and feed/deliver disks via the control mechanism thereby eliminating any hazards related to loading the manufacturing apparatus by hand. Feed and delivery locations would complicate the apparatus less by only requiring the transfer mechanism to enter each manufacturing station thereby making each station less complex and easier to repair.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kempf et al (U.S Patent No. 5,612,068, Zejda (U.S Patent No. 5,913,652), Perego (U.S Patent No. 6,312,519), and DeMint et al (U.S Patent No. 6,843,622) teach transferring and feeding mechanism for disk manufacturing apparatuses. Taylor (U.S Patent No. 3,338,199) teaches scoring an object for easier cutting.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EFL
12/19/2005




Allan N. Shoap
Supervisory Patent Examiner
Group 3700